THE

BOSTON MEDICAL AND SURGICAL JOURNAL.

VOL. LXVIII. THURSDAY, JULY 9, 1863. NO. 23.

PARTIAL DISLOCATION OF THE HEAD OF THE RADIUS IN YOUNG CHILDREN.

BY DANIEL V. FOLTS, M.D., BOSTON.

[Communicated for the Boston Medical and Surgical Journal.]

THIS is an injury which the surgeon not unfrequently meets with, without fully recognizing the anatomical seat of the accident. Several cases have occurred in my surgical practice during the past season, and in every case but the last, the particulars of which I shall give in detail, whilst the usual symptoms were present, in manipulating to ascertain the nature of the injury the pronation was suddenly overcome, and the limb was at once in as useful a condition as ever.

My last case occurred in a little boy of five summers. While at play he was caught by an older brother, when both hands were thrown behind him in a state of extreme pronation. He was forcibly held in this position, and whilst struggling to escape from his captor, he screamed out violently in intense pain. I saw him soon after, and found him still crying. His arm was hanging by his side, a little in front of his body; elbow slightly bent, hand pronated. To the question "what is the matter, my little boy?" he answered, "A. has hurt my elbow." I examined this articulation carefully, but could not detect the slightest deformity. Flexion and extension could be performed almost without pain; but on the slightest attempt to supinate the hand, the little fellow would scream in agony. An anodyne application was directed, and the arm placed in a sling. He slept well during the night, and made but little complaint the following day; but was not at all inclined to use the arm.

I took occasion, the following evening, to examine the arm when my patient was sound asleep, thinking it possible that the fear of being hurt prevented him from using the arm, or suffering me to rotate the radius. But the slightest attempt to alter the position of that bone relative to the ulna would awaken him, by the violence of the pain. I now concluded to etherize him, examine the fore-arm

and elbow carefully, and make forcible supination if that should be necessary. After a few inspirations he opened his eyes and made the chamber ring with his laughter. How much better to make him laugh, than cry! "That is a funny rag," he said, "let me smell it more." And then he would break out again and again in peals of laughter. I never saw the ether have a more pleasant effect upon a child. I now proceeded to examine the limb very carefully. The wrist was perfectly normal, and the elbow, with the exception of a slight swelling, free from all deformity. Grasping the wrist with my right hand, and holding the elbow in my left, with a thumb upon either extremity of the radius, I made forcible and extreme supination. There was some resistance at first, but soon I felt a slight shock and heard an indistinct snap under my left thumb. All resistance was now overcome, every motion of the joint was perfect, and has continued so to the present day.

This case settles the question, in my own mind, as to the seat of the "injuries of the arm in small children," that are of such common occurrence, and about which so little that is satisfactory can be found in our ponderous tomes on surgery. In the present case, we have the most satisfactory evidence that it was the elbow, and not the wrist, that was injured; that it was the head of the radius, and not the inter-articular fibro-cartilage of the wrist that was involved. My patient was an intelligent little fellow, and just as capable of locating pain as an adult, and he complained exclusively of the elbow.

The symptoms in this case were precisely the same as those M. Goyraud, of Aix, enumerates in his observations; but the reduction entirely disproves his theory, whilst it confirms the opinion of Dr. Hodges, of this city, as set forth in an article published in Volume Lxvii., page 129, of your Journal. In the cases published by both these gentlemen, the patients were so young that they could give no reliable indications as to the precise locality of the injury. They would cry when the limbs were moved, but that was about all: there was evidently pain somewhere, but it was left for the surgeon to ascertain its seat as best he might; and in most cases, as we have seen, whilst he was manipulating, the injury disappeared before a satisfactory diagnosis could be made out. But in this case the reduction was less easily effected. Even after the patient was fully etherized, the same obstacle to its accomplishment seemed to exist as before, and any slight attempt to rotate the radius, outward, was brought up by some mechanical impediment. This enabled me to handle the parts more at my leisure, and to take every precaution to ascertain accurately which end of the radius was involved. The peculiar snap attending the reduction, though much more feeble, of course, was in its nature not unlike that which every surgeon has felt when the head of the humerus glides back into its glenoid home.

38 *Maverick Square, June,* 1863.

ON AMPUTATION OF THE THIGH.

By John Green, Fellow of the Massachusetts Medical Society, late Acting Assistant Surgeon U.S.A.

[Continued from page 404.]

Two or three especial points deserve notice in connection with Amputation of the Thigh.

A bad position of the patient upon the table may give rise to great embarrassment in the retraction of the soft parts. All trouble from this cause may be avoided by drawing the body well down, so that the nates may rest upon the edge of the table.

The position of the limb during the operation is a matter deserving of more attention than is usually bestowed upon it. It is well known that after amputation of the thigh the stump inclines to turn upward, through the action of the psoas-iliacus muscle. In proportion as this elevation takes place, the muscles on the back part of the thigh (the long head of the biceps, the semi-membranosus, semi-tendinosus, and adductor magnus), which all arise from the tuberosity of the ischium at a point about two inches diagonally behind and below the centre of motion of the head of the femur, are drawn away from the end of the bone, while the vasti and crureus, which arise from the front and sides of the femur, are not at all relaxed by the change in position. This fact, which has been long recognized, has led to the direction, either to leave the soft parts longer behind than in front,* or to confine the thigh by straps in a horizontal position during the course of the after-treatment.† It is an excellent plan, in this and in some other amputations, to operate upon the limb in the same position which it is likely to assume during the after-treatment, and this position, in the case of the thigh, will be that of partial flexion on the body. The thigh may be still farther elevated, before sawing the bone, with the advantage of greatly facilitating the separation of the muscular and tendinous attachments at the linea aspera.‡

The dread of lacerating the periosteum has led to the precept never to apply the saw until this membrane has been divided by a circular sweep of the knife. This is a necessary precaution in very young persons, in whom the periosteum is easily detached from the bone, but is superfluous in the case of adults. It is of much greater importance carefully to avoid denuding the bone above the point of its section, even if we have to divide a few muscular fibres with the saw.

Hæmorrhage.

The control of the hæmorrhage during the operation is effected either by pressure upon the femoral artery, or by tightly encircling the whole limb with a fillet; or the two methods may be combined, as is the

---

* Malgaigne. † B. Bell. Liston.
‡ Charles Bell. Great Operations, op. cit., p. 60.

case in the tourniquet of Petit, which is now in common use. The old method of tying the fillet tightly around the limb has the great disadvantage of acting slowly, thus compressing the veins before the arteries, and allowing the whole limb to become congested with blood before the operation is commenced. The introduction of the "garrot," however, by Morel, rendered the method nearly perfect. The fillet is tied loosely around the thigh, and is tightened, at the very instant of making the first incision, by twisting with a short stick placed beneath it. The action of the "garrot" is almost instantaneous, and it is powerful enough completely to arrest the circulation in all the vessels, both great and small. The tourniquet of Petit is a strap adjusted by a buckle, and capable of being tightened by turning a screw, which at the same time compresses the main artery by means of a wooden pad. The action of this instrument is slower and less powerful than that of the "garrot," and it allows the limb below it to become engorged with blood, without affording absolute security against arterial hæmorrhage. The "compressor" of Dupuytren consists of two pads connected with each other by a strong arc of steel. The larger pad, which is made flat, is applied to the side of the limb opposite to the main artery, and serves as a point of resistance to the smaller pad, which is forced down upon the vessel by turning a screw. This instrument does not prevent the return of the blood through the veins, and it may be applied, as may also the tourniquet of Petit, to compress the femoral artery against the horizontal ramus of the pubes where it emerges from the pelvis.

All instruments for the compression of the femoral artery have the disadvantage that they cannot be easily applied so high as is often desirable, and when placed too near the point of amputation they interfere with the proper retraction of the soft parts, if indeed they do not become loose or slip off altogether at the very moment when they are most needed. They are therefore better adapted to amputations in the lower than in the upper half of the thigh, and they interfere less with the performance of the operation by flaps than by the circular methods. The best method of compressing the femoral artery is by the fingers of a thoroughly competent assistant. Slight pressure suffices, and it is applied at the exact point where the pulsation of the vessel is felt. The pressure may be kept up, with but little fatigue, for an hour or more, if necessary, and it may be relaxed or resumed in an instant. The compression of the femoral artery may be made most conveniently against the pubes, and at this point it offers no impediment to the retraction of the soft parts. In the absence of a competent assistant, the "garrot," or handkerchief and stick, is probably a more efficient instrument than the common tourniquet.*

* See Nathan Smith, op. cit., p. 223. Also Dupuytren, Leçons Orales, tome 2me, p. 381.

Every surgeon has observed that, at the moment of making the incisions, quite as much blood often flows from the vessels of the severed limb as from those which remain connected with the heart. The hæmorrhage from this source is often greatly increased by the unskilful manner in which the tourniquet is applied; but even under the most favorable circumstances the loss of blood will be equal to the quantity originally contained in the limb, in addition to that which escapes, owing to the imperfect suspension of the arterial circulation. The idea of emptying, in part, the vessels of the limb before the operation, is found in the writings of Prof. Nathan Smith* and of Sir Charles Bell. The former surgeon proposed either to elevate the limb above the level of the body, or to compress the main artery for a few minutes before tightening the handkerchief, which he used instead of the tourniquet. Sir Charles Bell's† plan is more efficient; it consists in applying a roller firmly and evenly to the whole limb before operating, by which course "the veins are emptied into the general system, and blood is saved instead of being withdrawn." This application of a roller to the limb may be of the greatest service in a very exhausted state of the patient, and there is no good reason why it should not be generally adopted in the case of the larger amputations.

For the arrest of the hæmorrhage after amputation, very many methods have been employed at different times, but they may all be divided into two classes, according as they are applied to the main artery only or to the whole cut surface. Of the former methods the ligature deservedly stands first. The common direction is to draw out the end of the artery from its sheath by forceps‡ or by a tenaculum, and to tie it with strong silk or linen thread. In a healthy state of the tissues this is easily effected; the artery is connected with the surrounding parts by lax areolar tissue, and can readily be drawn out for half an inch or more, retracting again into its sheath as soon as it is released. In a limb, however, which has been the seat of inflammation, this areolar tissue is often found consolidated by a deposit of coagulated lymph, which glues the artery firmly to its sheath. In this state of the parts, which is frequently observed in secondary amputations, it is often impossible to isolate the artery,§ and the only alternative then is to include some of the surrounding tissues in the ligature, taking care, however, not to tie up any large nerve. This "mediate" ligature is best applied with the aid of a curved needle or tenaculum. The point of the instrument is passed into the face of the stump a short distance from the mouth of the vessel, and is carried across in such a way as to transfix the walls of the artery, emerging on the other side; the ligature is now tied firmly behind the tenaculum, and thus the vessel is constricted

* Op. cit., page 224.
† Charles Bell. Great Operations, page 58, note.
‡ Paré. § Liston. Elements of Surgery, Am. Ed., 1837, p. 518.

just above the point where it has been transfixed. Applied in this way, the ligature is more liable to slip off than when it is placed immediately upon the artery, and the larger the mass of flesh is which is encircled by the thread, the greater will be the probability of its shrinking under the pressure and allowing the ligature to become loose. In cases where it is necessary to trust to this method for the closure of the femoral artery, it may be well to use a small curved needle instead of the tenaculum, tying the ligature behind it, and leaving the needle in its place for several days; the needle might be drawn out at any time by means of a thread passed through its eye. The "mediate" ligature is especially useful in the case of the smaller muscular branches, which are not easily isolated and at the same time become very soon obliterated. The thread used for ligatures should be strong enough to bear considerable tension, in order that it may sink a little into the walls of the vessel, and thus afford the greater security against slipping. A very fine ligature is seldom of sufficient strength to constrict a large artery, and is liable, also, to cut through the tissues; a coarse cord, on the other hand, cannot easily be tied with sufficient firmness about a small vessel, especially if the so-called surgeon's knot is employed. The size of the ligatures should bear a certain relation, therefore, to the diameter of the vessel, ranging from coarse surgeons' or saddlers' silk, or coarse linen thread, for the largest artery, to fine sewing silk for the smaller vessels. It would probably afford additional security against slipping when the knot is tied, if the thread, instead of being simply waxed, were prepared beforehand by soaking it in melted wax, or in a mixture of wax with a little pitch or resin.

The proper disposition to be made of the free ends of the ligature has long been a subject of dispute, and is not yet altogether settled. In an open wound, healing by granulation, the ligatures are thrown off with the discharges long before the process of cicatrization is far enough advanced to be injuriously affected by their presence. In such a case, therefore, it is best to cut off both ends of the ligature pretty close to the knot. In cases, however, where union of the soft parts takes place by first intention, the knots often become enclosed in the tissues and give rise to irritation which may continue for a long time, until the offending thread is discharged by the formation of an abscess. To avoid trouble from this cause, one end of each ligature is generally left projecting between the lips of the wound, in order that the knot may be drawn out as soon as it becomes detached from the mouth of the artery. A few surgeons still adhere to the bad practice of cutting off both ends of the ligature close to the knot;* others have recommended fine catgut or

* Almost all authorities concur in recommending the removal of one end only of each ligature, the practice of cutting them short having been thoroughly tested by Lawrence, Liston and others, who all unite in condemning it. Very lately, however, Heyfelder has de-

shreds of split tendon, upon the erroneous supposition that such substances become speedily absorbed when buried in living tissues.

Torsion, or violent compression of the walls of the artery, is often employed with advantage for small vessels whose muscular coat is easily stimulated to contraction, but it is both troublesome and unsafe when applied to the larger arteries.

Dr. Simpson,* of Edinburgh, has recently called attention to a very useful invention which he calls "acupressure." It consists in compressing the artery at a single point of its length by means of a strong pin of about the size of an ordinary knitting needle. The pin is thrust through the skin and other tissues of the stump on one side of the artery, in such a direction that its point passes quite near the vessel, against which it is made to press pretty firmly by suddenly changing its direction and thrusting it onward until it emerges on the other side. The pressure should not be very powerful, for a very moderate force suffices to control the circulation in the artery, and any unnecessary compression would only cause inconvenience, and might endanger the vein or nerve. The theory of acupressure is aptly illustrated by Dr. Simpson, who compares the vessel to the stem of a flower fastened by a pin to the lapel of a coat. This method, which is very easy of application, seems destined to more extended use in surgery, and may even deserve a trial as a substitute for the ligature in the treatment of aneurism. Acupressure seems hardly indicated in ordinary cases of amputation, and is not applicable to secondary amputations in inflamed or congested tissues, but in the treatment of secondary hæmorrhage it promises to render good service.

The actual cautery has been properly abandoned for very large vessels, owing to the uncertainty of its immediate action, and the very great liability to the recurrence of dangerous hæmorrhage upon the separation of the eschar. For small arteries, the hot iron is both efficient and easy of application, and might be employed with advantage much oftener than is now the fashion. Caustics, such as the old "button of vitriol," &c., are more painful and less efficient than the actual cautery, and it is almost impossible to confine their action to the bleeding point.

The alleged advantage of many of these substitutes for the ligature is that they do not interfere with union by first intention by interposing any foreign substance between the opposite surfaces of the wound. This advantage, however, is unreal in the case of amputations, for the sharp end of the bone always excites more or less of inflammation, attended by suppuration in the very deepest part of the wound; the ligatures, therefore, do good, for they prevent the formation of sinuses and abscesses by keeping open a free passage

---

nounced the custom of leaving one end as "neither necessary nor useful, but altogether injurious and wholly unjustifiable." (See the New Sydenham Society's Year Book for 1860, page 271.)

* Edinburgh Medical Journal, January, 1860.

for the discharge of the matter. It will generally be found most convenient to collect the several ligatures into a single bundle, bringing them out together at the most dependent part of the wound. It is better to leave but one end to each ligature, and it is well to distinguish the ligature of the main artery from the others by tying a knot in it.

Two cases are occasionally met with in practice, in which it is impossible to close the artery by the ligature. When the nutritive artery of the tibia is divided a little below the point at which it enters the bone, it sometimes throws out a smart jet of blood which does not readily stop of itself. In this case compression with the finger, plugging the hole with wax, &c., have been proposed, but the simplest and most effectual plan is that adopted by Mr. Liston, which consists in driving in a small peg of soft wood and withdrawing it after a day or two by means of a bit of string tied to it. The other case occurs occasionally in old persons, in whom the walls of the arteries are often indurated by calcareous deposits. The most obvious course to pursue in this condition of the vessels, would seem to be the insertion of a plug into its open mouth, tying the ligature over it.

Hæmostatic agents which are applied to the whole surface of the wound, may be divided into two classes, according as they promote or impede the accomplishment of union by first intention. Of the latter class are the ancient methods of searing with a hot iron, cutting the soft parts with a red-hot knife, dipping the end of the stump in hot pitch or oil, strewing the raw surface with astringent or escharotic powders, binding agaric or sponges tightly against the bleeding surface, &c. &c. To these may be added the plans recently put forward of dividing the soft parts by the galvanic cautery,* or by the extemporaneous ligature (ecraseur);† also, the employment of powerful styptic solutions of sesqui-chloride of iron, &c. Some of these methods may be adopted with advantage in certain cases of secondary hæmorrhage, but they ought never to be used in any case in which union by first intention is possible.

Of the local applications which may arrest hæmorrhage without impairing the chances of speedy union, the free use of cold water and the exposure of the raw surface to the action of the air, are among the most important. Dashing or sponging the wound freely with cold water causes the immediate contraction of the mouths of the smaller vessels, but bleeding is very apt to recur whenever reaction takes place. The use of cold applications, therefore, to be effectual, must be continued for a considerable time, and great care must be taken to protect the patient from the discomfort of cold and wet bed-clothes. The exposure of the open wound to the air acts in part, doubtless, by the cooling effect of evaporation, but its chief efficacy is probably due to the stimulating action of the oxygen upon

* Middeldorpf. † Maisonneuve.

the tissues. A wound thus exposed for a time to the air, is very much less likely to bleed after it is done up than if treated by cold applications. The formation of clots between the opposite cut surfaces, which is one of the greatest obstacles to their early union, is prevented, and the dressings, when once applied, seldom require to be disturbed for several days. If sutures are used, they may be inserted at the time of the operation, while the patient is yet under the influence of chloroform, and loosely knotted together until the time arrives for finally adjusting them.

The local use of strong alcohol as a styptic, has been lately advocated in France.* When used of the strength of 36° Cartier (=89.6%), it coagulates the albumen on the surface of the wound, forming a greyish-white pellicle, and stops the hæmorrhage from the small vessels. It is also said to hasten the secretion of plastic lymph and to prevent diffuse suppuration by coagulating the albumen of the cellular tissue. At first view, it would seem that the contact of so powerful an agent with a fresh wound would almost of necessity cause the death of its surface, and thus entail a more or less tedious suppuration. Experiments have proved, however, that strong alcohol may be applied to fresh wounds without exciting inflammation, and it seems indeed to favor union by first intention, by thoroughly arresting the hæmorrhage from the small vessels.† Alcohol is moreover powerfully antiseptic, and offers many advantages over the solution of hypochlorite of soda as an application to sloughing and bleeding sores.

Primary Hæmorrhage after Amputation is a very common occurrence, and depends upon the imperfect closure of the smaller vessels, or possibly upon the accidental loosening of a ligature. Under the stimulus of the knife and of the exposure of the cut surface to the air, the muscular walls of the smaller vessels contract so as speedily to arrest the flow of blood from them. This contraction generally continues until coagula have formed, and the natural processes of repair have commenced. In other cases, however, the first arrest of the bleeding is rather the result of faintness than of arterial contraction, and the recovery of the patient from the shock may be attended by a renewal of the hæmorrhage. The best preventive of this accident, as has been already stated, is to leave the wound open to the air until its surface becomes glazed, and if bleeding recurs after the wound has been dressed, it should be immediately opened, so as again to expose its whole surface. If the bleeding artery can be found, it should be tied or twisted; but if the flow of blood ceases of itself, as it often does in such cases, the wound should be left open for an hour or two to glaze. Should the ligature slip off from the main artery, it should be secured again in the wound, or by an acupressure pin passed through the flap above; in

* Alcohol and Alcoholic Preparations in Surgery, &c. By F. J. Bataillé and Ad. Guillet. Paris. 1860.

† Alcohol and Alcoholic Preparations in Surgery, &c. Pages 4 and 20.

either case, however, the wound should be freely opened, lest the cure should be impeded by the presence of clots between the cut surfaces.

The term *secondary hæmorrhage* should be confined to those cases in which bleeding occurs from the failure of the natural processes by which the permanent closure of the vessels is effected. It often occurs at the time of the separation of the ligatures, and it may happen at any time by the gangrene or ulceration of the walls of the vessels. At this period a considerable part of the wound may have already healed, and its surface will have become so changed by the morbid action as to make it very difficult to find the end of the artery; and even if it could be easily found, its altered and friable walls are no longer fit to receive a ligature. In this state of things it is folly to tear or cut the wound open in the attempt to apply a ligature to the mouth of the artery. Stuffing the wound with lint or sponges may arrest the hæmorrhage for the moment, especially if aided by the use of styptic solutions, such as the sesquichloride of iron. The actual cautery is even less certain in secondary than in primary hæmorrhage from large arteries. All such local measures for the arrest of secondary hæmorrhage are extremely uncertain, and have besides the great disadvantage of interrupting the healing process.

Secondary hæmorrhage may also be treated by compressing the artery above the wound where its walls are probably healthy. In a few cases it may be sufficient to maintain constant pressure with the tourniquet for several days, until a clot has formed in the mouth of the artery, but as a general rule more decided measures are necessary. Under these circumstances, the choice must be made between acupressure and the ligature of the arterial trunk. Acupressure is readily applied at any desired point in the course of the vessel; it inflicts very slight injury upon the limb, and may therefore be repeated several times if it should be necessary. The needle should be passed into the skin, at a distance to one side of the artery somewhat greater than the depth of the vessel below the surface, and its point carried as nearly as possible beneath the artery. The outer end of the needle is then depressed, so as to compress the artery between the needle and the skin, and the needle is then pushed onward until its point emerges through the skin on the other side of the vessel. Should the pressure of the needle be insufficient to control the bleeding, its action may be aided by a few turns of the twisted suture taken over a compress laid along the course of the vessel.* Acupressure should be practised as near as possible to the open end of the artery, for fear of the continuance of the hæmorrhage by anastomosing branches. This method promises to

* A needle with a curved point, such as has been used by Mr. Startin in the treatment of varicose veins, would probably be better for this purpose than the straight acupressure needle used by Dr. Simpson. (See Braithwaite's Retrospect, Vol. xlii., page 161.)

render excellent service in the treatment of secondary hæmorrhage, and should be fairly tried before undertaking the much more serious operation of tying the femoral artery. Should acupressure fail, we have still the resource of laying bare the artery and tying it, which should be done either very near the end of the stump, or else above the point of origin of the larger collateral branches. Thus in amputations in the upper part of the thigh, it will probably be safest to tie the femoral artery above the origin of the profunda, and in any case, if a first ligature placed near the end of the stump fails to arrest the hæmorrhage, there need be but little fear of danger in tying the artery again at a higher point.*

After the hæmorrhage has been arrested, the chief care of the surgeon should be directed to the promotion of a healthy process of repair by granulation. It is not advisable, as a general rule, to separate the flaps, or in any way to disturb the existing adhesions; but if partial union has taken place in such a way as to form cavities for the lodgment of matter, they should be freely opened at the most dependent part, and the walls of the cavity kept in contact by means of a roller and compresses carefully adjusted at every dressing. If the hæmorrhage has been the result of rapid ulceration or sloughing, it is probably dependent upon impaired constitutional power, and its recurrence is to be opposed by a generous diet and tonic remedies.

[To be continued.]

Reports of Medical Societies.

EXTRACTS FROM THE RECORDS OF THE BOSTON SOCIETY FOR MEDICAL IMPROVEMENT. BY FRANCIS MINOT, M.D., SECRETARY.

May 25th.—*Enormous Abdominal Tumor.*—Dr. Borland presented two photographs of a patient with an immense abdominal tumor, and gave the following account of the case: —

"The patient was a widow woman, born in Ireland, and 55 years old. At the time of her entrance at the Channing Hospital (Sept. 12, 1862), she had been between twenty-nine and thirty years in this country. She had borne five mature children, the last about thirteen years ago, and was in good health till five years ago, when this disease commenced. She then first noticed a swelling in the left groin. This increased, and in about one year's time it assumed a central position, and gradually developed to an enormous size. Her ability to walk ceased about ten months before entrance, or in November, 1861. Her appetite and bowels were in fair condition at entrance, but she had imperfect control of her bladder, the urine dribbling away in her bed. Her catamenia ceased about a year before, in September, 1861.

* See Nélaton, Pathologie Chirurgicale, Tome 1re, page 235. Also for a discussion of the question of the high ligature of the femoral artery, see a paper by Mr. Porter in the Dublin Quarterly Journal for November, 1860, and Braithwaite's Retrospect, Vol. xliii., page 124.

"At entrance she was able to lie in bed in her usual position, which was on her back, inclining, from the weight of the tumor, to the left side; her lower extremities were displaced by the pendulous tumor, so as to present a frog-like shape. Vulva œdematous, anus distended and patulous, pulse 46.

"The tumor was generally dull on percussion, pendulous, overhanging the pubes, ossa ilia and upper portion of the thighs, to a great extent. Its circumference, a little oblique, at umbilicus, measured 4 ft. 9 in.; from xiphoid cartilage to pubes, along umbilicus, 2 ft. 5 in.; from one anterior superior spinous process of ilium to the other, 3 ft. 2 in.

"In October her power to lie down was gone, and she passed most of her time kneeling. In November the increase of the tumor and consequent distension became so great that she objected to being moved, 'fearing she would burst open.' In December she assumed the sitting position, which she retained until her death, by day and by night, as is represented in the accompanying photograph. The legs were greatly spread, the whole body inclining forward and resting on the lower part of the distended abdomen. A rest with a table and pillows was arranged before her, so as to receive her head or arms, as she preferred. On Dec. 20th, girth across lumbar region, at umbilicus, 5 ft. 3 in.; and from spines of the ilia across umbilicus, 4 ft. 5 in. The photographs were taken on March 28th, on which day her circumference across the lumbar region and umbilicus was 5 ft. 4 in., and around nates and umbilicus, 6 ft. 2 in. She died April 17th, the last few weeks of her life being marked by great suffering. There was considerable mortification of the abdominal walls at the time of her death.

"She required constant, watchful care to prevent the formation of bedsores—nor could they be wholly prevented; yet they were kept in subjection, so that after her entrance she was comparatively easy from this source of distress. What little medical treatment she received, was of course only palliative."

May 11th.—*Hæmatemesis.*—Dr. Ayer reported the case.

I. D., aged about 52 years, a man of temperate habits, subject only to tonsillitis, which was frequently followed by suppuration, had a severe attack, more than a year ago, of erysipelas of the face and head, which passed off favorably after a few weeks, and he returned to his usual pursuits. Early in January last, a second attack of erysipelas, more severe than the first, occurred, which continued for several weeks, followed by inflammation of the tonsils and soft palate. This difficulty was succeeded by bronchitis, which continued to trouble the patient till the first of April.

During this period of convalescence, Mr. D. walked out; but there was observable a blueness of the countenance and of the whole body; the whole surface was decidedly dusky. Accompanying this, there was œdematous swelling of the feet and legs, almost of a purple hue. Attention was early directed to the heart; the first and second sounds were almost always distinct, and in other respects its action was normal. The appetite improved; and no feelings of discomfort were experienced.

May 10th, feeling some disarrangement of the stomach, he took, without advice, a dose of infusion of senna and salts. During its ope-

ration, vomiting occurred, and a large quantity of coagulated milk, taken for breakfast, mixed with dark, grumous blood, was thrown up. Dr. A. saw him immediately, and a bowl containing at least two quarts of dark blood, with a mixture of curds, was shown him as the results of the last vomiting. A quantity similar and quite as great, Dr. A. was assured, had been thrown away. The patient was sitting up, and expressed himself as feeling very comfortable, and much relieved at the stomach. Acid. hydrochlor., diluted, was ordered. The heart's action was found regular, and the pulse at about 66 per minute. The cough and hoarseness continuing, ol. aselli was ordered, showering the legs with sea-water, and bandages.

There has been no hæmorrhage since; the bronchial symptoms have subsided, and the general health improved. The dusky hue of the skin, though still apparent, is passing away. When Dr. A. last met the patient, he expressed himself as very well, except that the swelling of the feet and legs yet troubled him, though they were improving.

May 11th.—*Aneurism of the Aorta.*—Dr. Ellis showed the specimen.

The patient was a young woman, who had been under the care of Drs. Jackson, Bowditch and C. E. Ware, in the Hospital, at different times. She attributed her disease to a violent blow given her by her husband in May, 1861, shortly after which she was attacked by acute pain across the upper part of the chest and shoulders, and with neuralgia in the left side of the head. There was also slight cough, but no other trouble till the following September, when she began to feel a deep-seated "smarting" beneath the sternum, opposite the second rib, with dyspnœa at night, hoarseness, and considerable difficulty in deglutition. In May, 1862, she noticed a swelling at the seat of pain; and in July all the symptoms became aggravated, she became unable to sit up long at a time, and lost the use of the left arm for a time.

She entered the Hospital in December, 1862, and at that time the tumor extended an inch or more above the upper edge of the sternum in front of the trachea, and down to the third rib. Its main projection corresponded with the right edge of the sternum, and was elevated about two inches, oval, and somewhat lobulated in form. A double pulsation (not violent) was quite perceptible over the whole tumor. The sounds of the heart were normal, and heard a little lower and to the outside of the natural position. An aneurismal bruit was heard in the right breast, chiefly under the clavicle, and about the carotid; but none was heard in the tumor. The respiration was louder in the right chest than in the left, and in the latter was somewhat bronchial. The patient had, at times, a peculiar, hard, hollow, hoarse cough, but never had crowing inspiration.

Her general health improved decidedly for some time after her entrance into the Hospital, and she was often up and about the ward. Early in January last œdema of the feet and legs began, and gradually increased. The symptoms grew more unfavorable till April 10th, when she suddenly expectorated a few ounces of aërated blood, and died in about ten minutes.

At the autopsy, the aorta was found to communicate, by an opening an inch and a quarter in diameter, just below the innominata, with a large and somewhat irregular sac, measuring six inches in its longest diameter, which extended in all directions, except to the right, the median line being but little encroached upon. By its pressure it had

caused absorption of the sternum, as low as the lower edge of the third rib. The sac was filled with a firm, almost colorless mass of fibrin, in portions of which layers could be distinguished, and in its lower part was a cavity, two inches in diameter, which communicated with the aorta, through the large opening above described.

The left primary bronchus was much flattened, and so closely adherent to the sac that an opening was noticed after its careful separation. No blood was found in the passage, however, or anything which indicated the seat of a rupture, though the coagulum was not removed from the sac to ascertain this point. The œsophagus was healthy. The heart was normal, except some atheromatous disease of the mitral valve. The lining membrane of the aorta contained many atheromatous points.

In the lower part of the left pleural cavity was about a pint of pus. The walls were uneven and ragged in some portions; elsewhere, the pleural surface was very firmly adherent. The left lung was but eight inches in length, was very firm, and of a slate-grey color. Many yellowish-white points and small cavities gave it the appearance of having been the seat of an extensive inflammatory process. The most distinct cavities were at the apex. A few small, blackish coagula were noticed in some of the bronchi.

The right lung was distended by air, and did not collapse after the removal of the sternum. In the middle and lower lobes were many small ecchymoses. In other respects the lung was normal. The liver was large, and so much congested as to present the nutmeg appearance. The kidneys were considerably larger than usual. The other organs were normal.

[Dr. Bowditch, alluding to this patient at a meeting of the Society some months ago, remarked that the left lung had become materially involved, as shown by flatness on percussion and bronchial respiration, and that it was perhaps getting into the inflammatory state which Dr. Ellis had already pointed out as depending on mechanical obstruction of the primary bronchus. Dr. Ellis's interesting paper on this subject may be found in Vol. III. of the Society's Transactions, page 25 of the Appendix; see, also, a case reported by Dr. Bowditch, in Vol. IV., Supplement, page 239. (*Boston Med. and Surg. Journal*, Vol. Lv., pages 357 and 380, and Vol. Lxv., page 321.)—Secretary.]

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON: THURSDAY, JULY 9, 1863.

Registration of Boston.—We have received the valuable annual report of the Births, Marriages and Deaths in the city of Boston during the year 1862, prepared with its usual accuracy and completeness by the City Registrar, Mr. Apollonio. The very first page conveys the most material proof we have yet met with that there is a war which is really affecting us at home, although out of hearing of warlike sounds and far removed from the scare and danger of rebel raids. What France suffered chiefly from after the exhaustive Napoleonic

wars was the want of fathers to replenish the empty columns of its census tables; and the absence during the past two years of so many of our marriageable and married young men, although but temporary, has already begun to influence the increase of our population in the same way. We find that the number of children born in Boston during the past year was only 5,258, a decrease from the number born the preceding year of 531, and the smallest number for fourteen years. Years of adversity are wont to be followed by a paucity of births, as is well known, and this view is confirmed by consulting the table of births since 1849, for in 1856 and 1857, which were preceded by years of plenty, the births were respectively 5,922 and 5,881, but the latter year being one of great mercantile distress, the number in 1858 fell to 5,597. This, however, is but a slight falling off when compared with the decrease of the past year, with which the element of poverty has had no connection, for it has been one of unusual prosperity to nearly all classes, and particularly to the poor.

The number of births is very evenly distributed among the four seasons—1,361 occurring in winter, 1,285 in spring, 1,287 in summer, and 1,325 in autumn. From a table exhibiting the percentage of births in each ward compared with that of the deaths in the same places, it appears that the ratio of births to the whole number born was less than that of the deaths in Wards 1, 3, 4, 5, 6, and 7, and, as Mr. Apollonio remarks, the births in Wards 1, 3 and 7, the densely-packed residences of our foreign population, have been steadily decreasing for several years, the ratio of deaths being greater than that of births. Of the 5,258 children born, only 1,285 were the offspring of parents born in the United States, while 2,295 were born of parents native of Ireland. The whole number of instances in which both parents were foreign-born was 3,913 or 74.42 per cent., or, in other words, only one fourth of the children born in Boston each year are of unmixed native parentage! When we consider, in connection with this, the fact that of the 2,094 couples married during the year, only 258 of the grooms and 377 of the brides were born in Boston, we readily see that, were it not for the constant stream of immigration hither from the great stock nursery of New England, Boston would soon lose itself in this rapidly increasing tide of foreign blood.

Some curious facts in regard to the colored population are presented, from which it appears that during the last three years the births of females considerably exceed those of the males, and that during the last eight years the deaths exceed the births by nearly 200, and the marriages by 12. "Estimating the white population at 180,000, the proportion of births to the whole number is as one to 34.50; while the ratio of colored births is as one to 49 in a population of 2,200. It is not the less interesting to observe, that while this difference in the natural growth of the two races is so strikingly in favor of the white, the marriages among the colored race were in the ratio of one to 58 of the population, while among the former they were only as one to 87.54! Thus it is shown, that in each of the aspects in which this subject may be viewed, the colored race seems, so far as this city is concerned, to be doomed to extinction."

The number of twin births during the year was 47, in 14 of which both children were males, in 13 both were females, and in the other 20 there was one of each sex.

The whole number of marriages, as above stated, was 2,094, being 72 less than that of the preceding year. The whole number of native-born grooms was 997, or 54.16 per cent., and of native-born brides 991, or 47.32 per cent. of the whole number. Of the 1,097 foreign-born grooms, 59.52 per cent. were born in Ireland.

The deaths during the year amount to 4,120, which is an increase of 155 over the number that died in 1861, and indicates a death-rate of 1 in 44.17 of the whole population. No epidemics have prevailed, although smallpox threatened at one time to burst into vigorous activity. It will continue to escape from control every few years and kill a few hundred persons, until the city enforces a more stringent rule in regard to vaccination. The deaths were also very evenly distributed among the different seasons, viz., in spring 1,020, in summer 1,087, in autumn, 1,004, and in winter 1,009. The largest number of deaths in any one month, 426, occurred, as usual, in August. The causes of death, numerically stated, are as follows:—Accidents, 142; abscess, 7; anæmia, 10; aneurism, 3; apoplexy, 56; asthma, 5; inflammation of the bowels, 34; disease of the bowels, 15; inflammation of the brain, 29; congestion of the brain, 45; disease of the brain, 82; disease of the bladder, 5; bronchitis, 104; cancer, 50; carbuncle, 2; catarrh, 2; cholera, 2; cholera infantum, 238; chorea, 1; colic, 1; cholera morbus, 22; consumption, 739; convulsions, 140; croup, 114; cyanosis, 14; debility, 32; diabetes, 5; diarrhœa, 87; diphtheria, 46; dropsy (all kinds), 97; dysentery, 63; epilepsy, 21; erysipelas, 20; fever (unknown), 3; do. bilious, 6; do. remittent, 1; do. scarlet, 236; do. typhoid and typhus, 85; gangrene, 12; gastritis, 23; gout (stomach), 1; hæmorrhage, 25; heart, diseases of, 115; hernia, 5; hip, disease of, 1; homicide, 6; hydrocephalus, 203; infantile diseases, 108; influenza, 1; insanity, 4; intemperance, 50; intussusception, 1; jaundice, 5; kidneys, diseases of, 18; laryngitis, 1; liver, diseases of, 32; lungs, congestion of, 38; lungs, inflammation of, 218; lungs, diseases of, 11; marasmus, 96; malformation, 1; measles, 78; old age, 81; paralysis, 59; peritonitis, 12; phlebitis, 1; pleurisy, 20; polysarcia, 2; premature birth, 47; prostate, disease of, 1; puerperal diseases, 26; purpura, 8; pyæmia, 1; rheumatism, 14; scrofula, 19; sore throat, 23; spine, diseases of, 9; smallpox, 13; suicide, 15; sunstroke, 1; stomach, diseases of, 4; syphilis, 14; tabes mesenterica, 3; teething, 22; thrush, 6; trismus nascentium, 2; tumor, 9; ulcers, 4; uterus, diseases of, 3; unknown, 41; whooping cough, 39; worms, 1; wounds (gunshot), 3. Total males, 2,086; females, 2,034. Cancer destroyed 50 persons, 11 males and 39 females, and its local manifestations were as follows:—breast, 10; stomach, 8; uterus, 7; unknown, 6; abdominal, 5; liver, 3; rectum, 2; neck, 2; leg, 2; side, face, tongue, head, and bladder, 1 each. Consumption, as usual, carried off a large number of victims, the deaths from this cause making 18.57 of the entire mortality from disease. Of these, 284 only were born in the United States, 336 in Ireland and 114 in other foreign countries. Forty-two per cent. of the deaths from this disease took place in Wards 1, 7 and 12, 114 occurring in South Boston alone.

From a table showing the per centage of deaths in certain periods of life, it appears that 22.18 per cent. of the mortality was among infants under one year of age, 23.66 of those between 1 and 5, while only 4.41 was of children between 5 and 10, and 1.55 per cent. of those be-

tween 10 and 15. More than 50 per cent. of the whole number of the deaths were of children under 10 years old. Of those who died, 26 per cent. only were of New England origin, and 52 per cent. were of Irish parentage alone. The number of still births during the year was 361.

Fossil Man.—Not long since, in some remarks upon the *Antiquity of Man*, we alluded to the discovery of M. Boucher de Perthes in the ancient drift deposit of the Somme valley, of flint implements wrought by the hand of man and associated with the bones of extinct mammalia, namely, Elephas primigenius, the cave-bear, cave-hyæna, &c. On the 28th of March this same indefatigable gentleman, while engaged in his explorations, was fortunate enough to find the only link wanting to complete the chain of evidence as to the authenticity and importance of his previous labors, for in the high level gravel beds of Moulin-Quignon near Abbeville, and beneath a layer of rough flints, he found a human jaw. This discovery, of so vast importance both to anthropology and to geology, necessarily produced great excitement in the scientific world, and strong doubts as to its authenticity were expressed by men of science in England. On May 15th, a congress of palæontologists was held at Abbeville, and the whole evidence in the case was thoroughly examined. The English men of science present, Dr. Falconer, Mr. Prestwich and Prof. Busk, who had previously been loud and strong in their statements as to its falsity, were obliged to admit the accuracy of the views of such men as Milne-Edwards, Quatrefages, Lartet and others, who had never doubted the authenticity of the specimen. The following are the conclusions arrived at, unanimously, by the commission :—" 1. That the jaw found at Moulin-Quignon by M. Boucher de Perthes is really fossil. 2. That it was extracted by that gentleman himself from this virgin and undisturbed bed. 3d. That the flint implements which had been said to be fabricated by the workmen are incontestably ancient."

The specimen, which is said to resemble the jaw of the Esquimaux more than that of any other race now living, is thus described by Prof. Busk :—

" The black coating was washed off readily by means of a sponge, and the residuary spots in the minute hollows were removed by the aid of a tooth-brush. The general color of the washed surface was a light buff, mottled with brown stains. The outer surface was tolerably smooth, presenting little indication of the erosion commonly seen in old buried bones. There was no appearance of dendritic patches either on the exterior or within, and no infiltration of metallic matter. The substance of the bone was dry and friable, especially towards the alveolar border, but, on the whole, it was tolerably firm under the saw, and the fresh section afforded a distinct odor of sawn bone. The internal cancellated structure was of a faint brownish tinge, and the cells were free from any incrustation. The most remarkable appearance observable in the section was the lining of the dental canal with a thin layer of fine gray sand, free from any admixture with the black metallic matrix which blocked up the orifice of the canal below the condyle. The section of the fang showed that the dentine, so far as exposed, was white, and in no respect different from that of a recent tooth. The enamel was white and brilliant. The socket to-

wards the upper part was not completely filled by the fang, and the interval was partially occupied by black matrix and sandy particles."

THE CARNEY HOSPITAL, IN BOSTON.—The Carney Hospital, named in honor of its founder, our respected fellow citizen, Andrew Carney, Esq., is now ready for the reception of patients.

The site is an admirable one for such an institution, containing about thirty-seven thousand square feet of land, situated on the top of the hill, near the Reservoir, South Boston, overlooking the City, and commanding a fine view of it, the harbor, and the surrounding country, open on all sides, allowing a free circulation of pure air.

The interior arrangements include every thing required for the comfort of patients. The number of beds is at the present time limited to between thirty and forty. The present building will soon be replaced by a large and handsome brick edifice, capable of accommodating a much greater number of patients, the erection of which will be commenced early next spring.

The hospital is under the charge of the Sisters of Charity, whose Superior, Sister Ann Alexis, of the St. Vincent De Paul Orphan Asylum, has been long known and esteemed by our citizens for her unwearied exertions in behalf of the orphans committed to her care, and whose labors have been crowned with such signal success. This simple announcement is sufficient guaranty that every thing will be done for the comfort and welfare of the patients that careful nursing and unremitting attention can effect.

No distinction of nation, creed or color, will be observed in the admission of patients, and all diseases and injuries, medical and surgical (except contagious and infectious), will be received. The hospital is intended for both paying and free cases, and to afford the greatest amount of good to the largest number. This will necessarily exclude chronic and incurable cases from admission, or a lengthened stay, to the exclusion of cases that might derive much benefit from its treatment.

Applicants for admission may apply personally, or by letter, to Sister Ann Alexis, at the hospital, Old Harbor Street, off Dorchester, opposite Fifth Street, or at the Orphan Asylum, Camden Street; to Dr. Thaxter, 370 Broadway, South Boston, and to Dr. J. G. Blake, 95 Harrison Avenue.

The medical staff consists of Dr. D. McB. THAXTER, Visiting Surgeon; Dr. J. G. BLAKE, Visiting Physician; Dr. WINSLOW LEWIS, Consulting Surgeon; Dr. HENRY I. BOWDITCH, Consulting Physician.

DECAPITATION.—The following is an extract from the London *Times* in relation to some experiments which have recently been made in the Paris slaughter-houses. They seem to show that the guillotine even, which is considered the most merciful instrument of penal execution, may not so completely destroy the reflex action of the muscular system as to prevent those terrible phenomena which bear so strong a resemblance to those of life in the corpse.

"The Conservator of the Paris slaughter-houses, being of opinion that the mode of slaughtering oxen by knocking them on the head with a heavy metal instrument must cause the animal excessive pain, endeavored to discover another mode to avoid this suffering, and at

the same time to preserve the slaughtermen from the danger to which they are exposed in the performance of this disagreeable duty. He thought that enervation would accomplish his object, and his opinion was founded on the doctrine taught by physiologists, who assert that the separation of the spinal marrow at once destroys animal life. Experiments were tried on more than 100 oxen, and it was demonstrated that although the ox was more quickly put to death, his sufferings were not the less excruciating, inasmuch as his entire vitality was preserved, and that death did not ensue until after an agony of fifteen or sixteen minutes. These experiments were repeated on calves and sheep, and, in place of merely cutting the spinal marrow, the head was separated from the body, in order to observe the degree of vitality which would still remain in each of the separated parts. A calf was suspended, and a butcher's boy cut off his head with a knife. The operation was accomplished in a quarter of a minute. The head was immediately placed on a table, and it lost two ounces and a half of blood in the space of six minutes. During the first minute all the muscles of the face and neck were agitated with rapid convulsions, and during the two following minutes the convulsions assumed another character. The tongue was stretched out of the mouth, which opened and closed alternately; the nostrils opened, as if the animal experienced a difficulty of breathing. The convulsions became more active when the tongue or nostrils were pricked with a needle. When the hand was applied to the mouth or nostrils, respiration was felt to be continued by the air entering and coming out. When a finger was brought within an inch of the eye, in the direction of the pupil, the eye was quickly closed, as if it wished to avoid the touch of the finger, and the same result followed at certain intervals. At length the eye did not close until the eyelid was touched. It was remarked that the eye remained closed as long the finger remained in contact with it. These phenomena became gradually weaker, and ceased entirely after four minutes. Even then, when the spinal marrow was pricked with a needle, the convulsions recommenced in the entire face, tongue and eyes. After the sixth minute all contraction ceased. While these experiments were being performed, the body, which remained suspended, was greatly agitated. The agitation ceased gradually, and was replaced by contractions, which continued more than an hour. But this was always observed, in whatever manner the throat was cut. Forty calves and fifty sheep were decapitated, and they all presented the same phenomena. The director of the Paris slaughter-houses convinced himself by these experiments that an ox suffered more by being decapitated than by being struck down with a heavy bar of iron; and that the bar, by producing immediate stupefaction, prevents the animal from suffering, while the bleeding, immediately effected, deprives him of life before the head recovers sensation."

ANOTHER DEATH FROM CHLOROFORM.—We wonder, as nearly every English journal brings to us the account of still another death from chloroform, how many sacrifices will yet be required to open the eyes of the public there, for of the profession we have no hope, to the facts that chloroform may kill anybody who inhales it, while ether is capable of producing the same anæsthetic effect with only a little more trouble, but with entire safety. The last victim was a distinguished

member of our own profession, Mr. F. Wakefield Skey, M.R.C.S., the following account of whose death is taken from the *Lancet* of June 6th.

"The profession to whom he is so deservedly well known will sympathize with Mr. Skey in the severe loss sustained by him in the death of his eldest son, which took place on Friday last under the following melancholy circumstances:—The deceased had long suffered from a severe neuralgic disease, to obtain relief from which he frequently had recourse to chloroform, but with only temporary benefit. More than once he carried the anæsthesia to such an extent as to cause considerable alarm, especially on one occasion, when, acting as house-surgeon to St. Bartholomew's Hospital, he remained so long under the influence of the subtle agent, as to necessitate recourse to galvanism and to artificial respiration. On recovery he assured his anxious and deeply afflicted parents that it was the last time he would use it without advice. The promise he religiously kept until Friday last, when an unusually severe paroxysm came on, and having to meet his father and several friends at dinner, he again had recourse to his old, but on this occasion fatal, remedy. How long he had succumbed to the active agent is not precisely known, but he was found in his chamber, kneeling at a chair, with a handkerchief to his face, which had contained the chloroform. He immediately received every attention, but too late; the vital spark could not be recalled. The deceased, who was only 31, had attained to considerable excellence in music, poetry and painting."

VITAL STATISTICS OF BOSTON.

FOR THE WEEK ENDING SATURDAY, JULY 4th, 1863.

DEATHS.

	Males.	*Females.*	*Total.*
Deaths during the week	43	34	77
Ave. mortality of corresponding weeks for ten years, 1853—1863,	36.2	30.2	66.4
Average corrected to increased population	00	00	73.16
Death of persons above 90	1	1	2

Mortality from Prevailing Diseases.

Phthisis.	Croup.	Scar. Fev.	Pneumon.	Variola.	Dysentery.	Typ. Fever.	Diphtheria.
12	3	0	6	0	1	0	1

ERRATUM.—In the JOURNAL of last week, p. 449, 6th line from top, for "scientific" read *mercantile.*

BOOKS AND PAMPHLETS RECEIVED.—On the Medical Selection of Lives for Assurance. By Wm. Brinton, M.D. From third London Edition. (From the American Editor, Dr. W. W. Morland.)—Report of the Board of Health of the City of Sacramento, Cal., for the year ending March, 1863.—Morbus Coxarius. By Louis A Sayre, M.D.—New Views of the Cause, Prevention and Cure of Yellow Fever. By J. W. Redfield, M.D. (From the Author.)

JOURNALS RECEIVED.—Edinburgh Medical Journal, June, 1863.—Chemist and Druggist, Vol. x., No. 46.—American Medical Times, Vol. vii., No. 1.—Medical and Surgical Reporter, Vol. x., No. 8.—Eclectic Medical Journal, July, 1863.—Chicago Medical Examiner, Vol. iv., Nos. 3 and 4.—Dental Cosmos, June, 1863.—Pacific Medical and Surgical Journal, May, 1863.

DEATHS IN BOSTON for the week ending Saturday noon, July 4th, 77. Males, 43—Females, 34.—Accident, 3—apoplexy, 2—inflammation of the bowels, 2—congestion of the brain, 2—disease of the brain, 2—bronchitis, 2—cancer, 1—cholera infantum, 2—cholera morbus, 2—consumption, 12—convulsions, 1—croup, 3—debility, 1—diphtheria, 1—dropsy, 3—dropsy of the brain, 1—drowned, 3—dysentery, 1—typhoid fever, 5—disease of the heart, 3—disease of the kidneys, 1—disease of the liver, 2—congestion of the lungs, 1—inflammation of the lungs, 6—marasmus, 1—old age, 1—rheumatism, 1—teething, 1—thrush, 1—unknown, 9—whooping cough, 1.

Under 5 years of age, 20—between 5 and 20 years, 11—between 20 and 40 years, 19—between 40 and 60 years, 11—above 60 years, 16. Born in the United States, 48—Ireland, 21—other places, 8.